

**SPECIFICATION AMENDMENTS:**

The specification including the abstract of the disclosure has been rewritten in response to the Examiner's objections. Please replace the specification with the substitute copy enclosed herewith. A clean version and a marked up version of the specification are submitted herewith per 37 C.F.R. § 1.125.

**CLAIM AMENDMENTS:**

Please rewrite the pending claims as follows:

1. (Previously Amended) A method for measuring the flow speed of a liquid molten metal in an ingot mould equipped with a sliding field electromagnetic brake, comprising:

supplying the electromagnetic brake with electrical power from at least one constant power source, wherein one of current and voltage of the constant power source's output is held constant;

measuring the other of the current and voltage of the constant power source; and extracting the flow speed of the liquid molten metal from variations in the measurement.

2. (Currently Amended) The method of claim 1, wherein the electromagnetic brake has having at least one inductor which includes two packs of several conductors in a vertical direction, the method further comprising: applying, for each conductor, the following relation:

$$\text{grad}V = -i(\omega - vk) A - \rho j,$$

where  $\omega$  represents the A.C. excitation pulse of the sliding field,  $v$  represents the metal speed,  $k$  represents the wave number of the inductive sliding magnetic field,  $A$  represents the vector